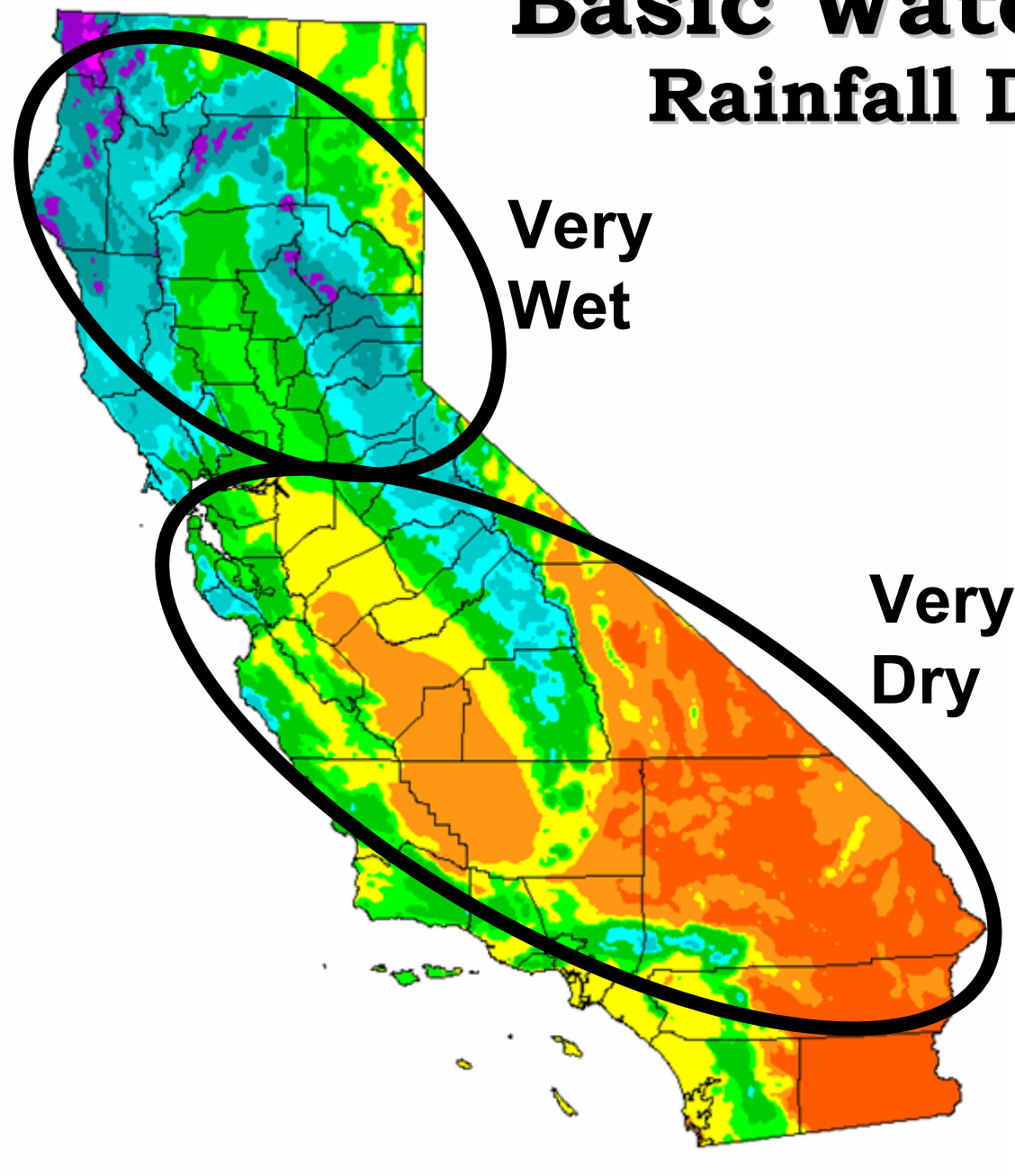
CALIFORNIA

BAY-DELTA

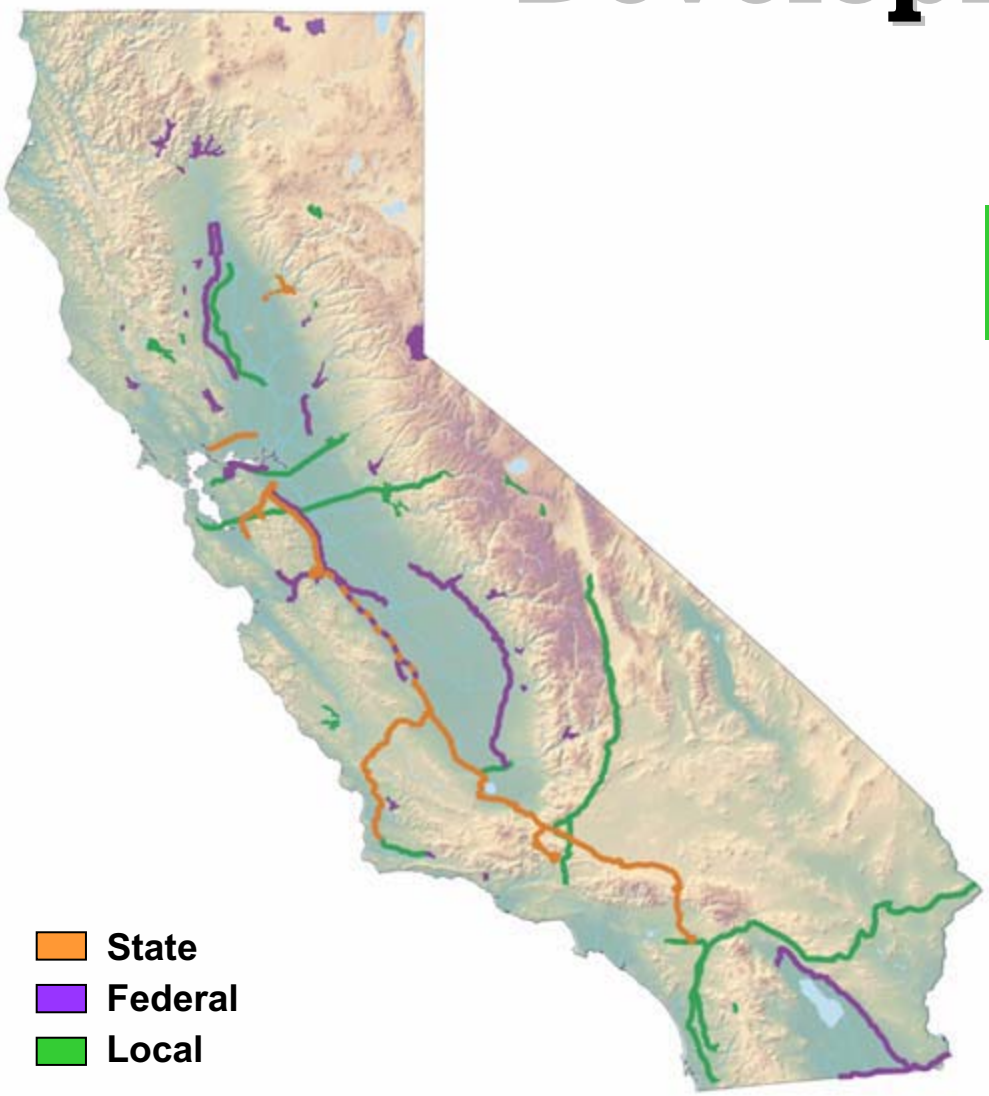
AUTHORITY

# Basic Water Dilem

## Rainfall Distributio



# California's Water Development




Los Angeles Aqueduct

Hetch Hetchy (1934) a
Mokelumne (1929) Aque

Colorado River Aque
(1941)

Central Valley Project (
and other Federal
Developments

State Water Project (19

# CALFED Program Area

# Importance of the Bay-Del System

- Drinking Water for 22 Million Cal
- 750 Plant & Animal Species
- 80% of the State's Commercial Salmon Fisheries
- $27 Billion Agricultural Industry
- California's Trillion Dollar Econo

# Defining the Bay-Delta Conf


California's Bay-Delta is an ecosystem in decline from decades of competing demands.


Water supplies are increasingly unreliable.


Water quality continues to degrade, making it difficult and expensive to meet drinking water standards.


Delta levee failures threaten agricultural, urban and environmental uses.

# Headlines


SAN FRANCISCO
The Examiner.
Smelt over
Endangered
CONTRA COSTA TIMES
FRIDAY
June 18, 1999
The Sacramento Bee
Protection of
By Nancy Vogel
Bee Staff Writer
Efforts to protect a small threatened fish have suddenly blown into a crisis that could disrupt water supplies to San Joaquin Valley farms as soon as next week and to the Silicon Valley later this summer, federal and state water officials said Thursday.
For the past month, federal biologists
fresnoBee.com
NEAR SMELTDOWN: A LITTLE FISH CAUSES A BIG WATER CRISIS IN THE DELTA.
June 26, 1999

# CALFED Bay-Delta Prog Timeline

**December 1994**
*Bay-Delta Accord*

**June 2000**
*Framework Announced*

**August 2000**
*Record of Decision Signed; CALFED Program Implementation Begins*

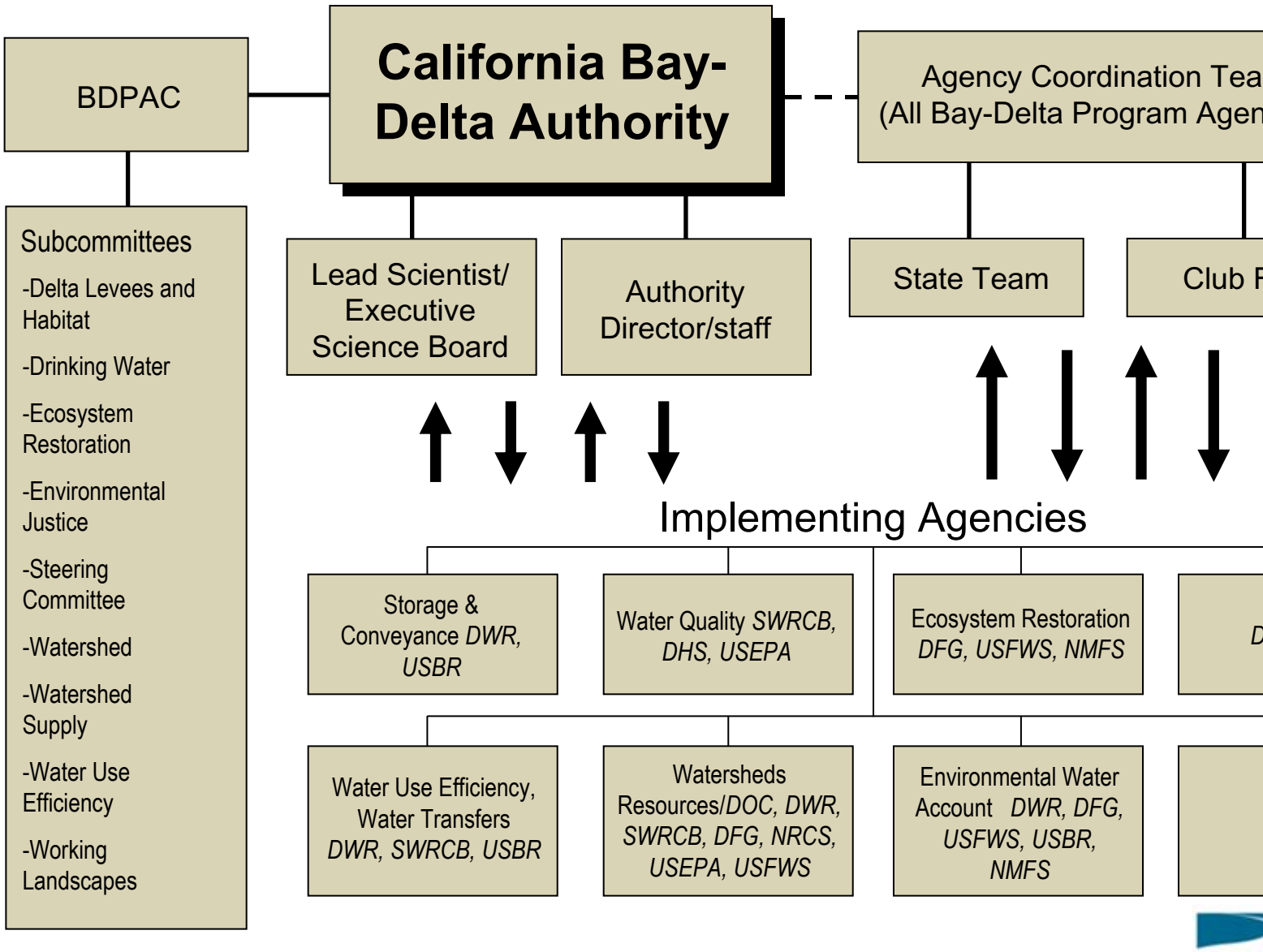
**2002**
*Governance Bill Signed*

**2008 Completion of Stage 1**
**First Seven Years**
*Foundation for Long Term Program Direction Completed*

**2030**

*The CALFED B Program is a con collaborative effo take 30 years to compl*

# Program Structure




12/19/2003

# Resource Management Goa

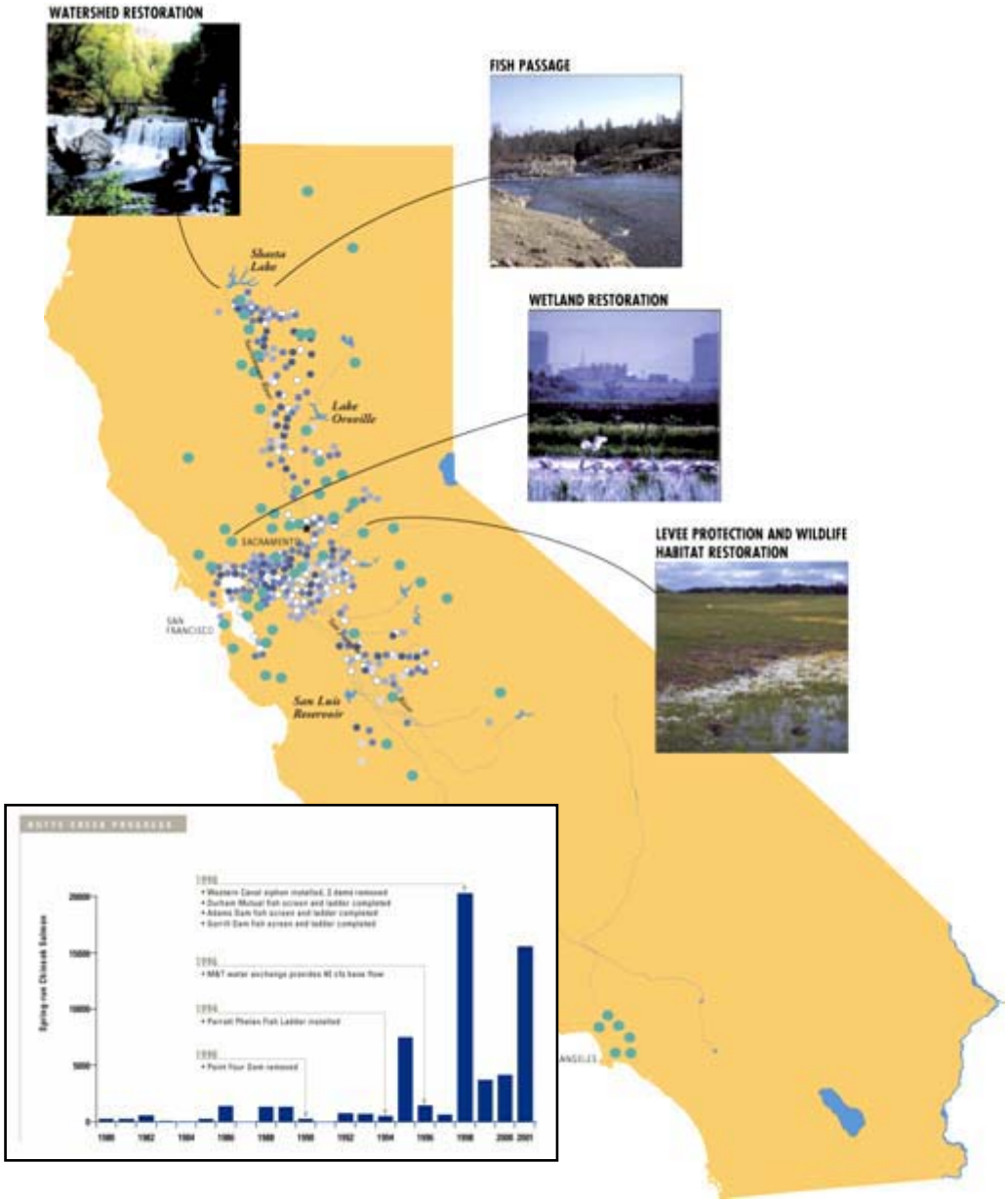
**Four resource management goals are implemented through 11 major program elements.**





**PROGRAM ELEMENTS**

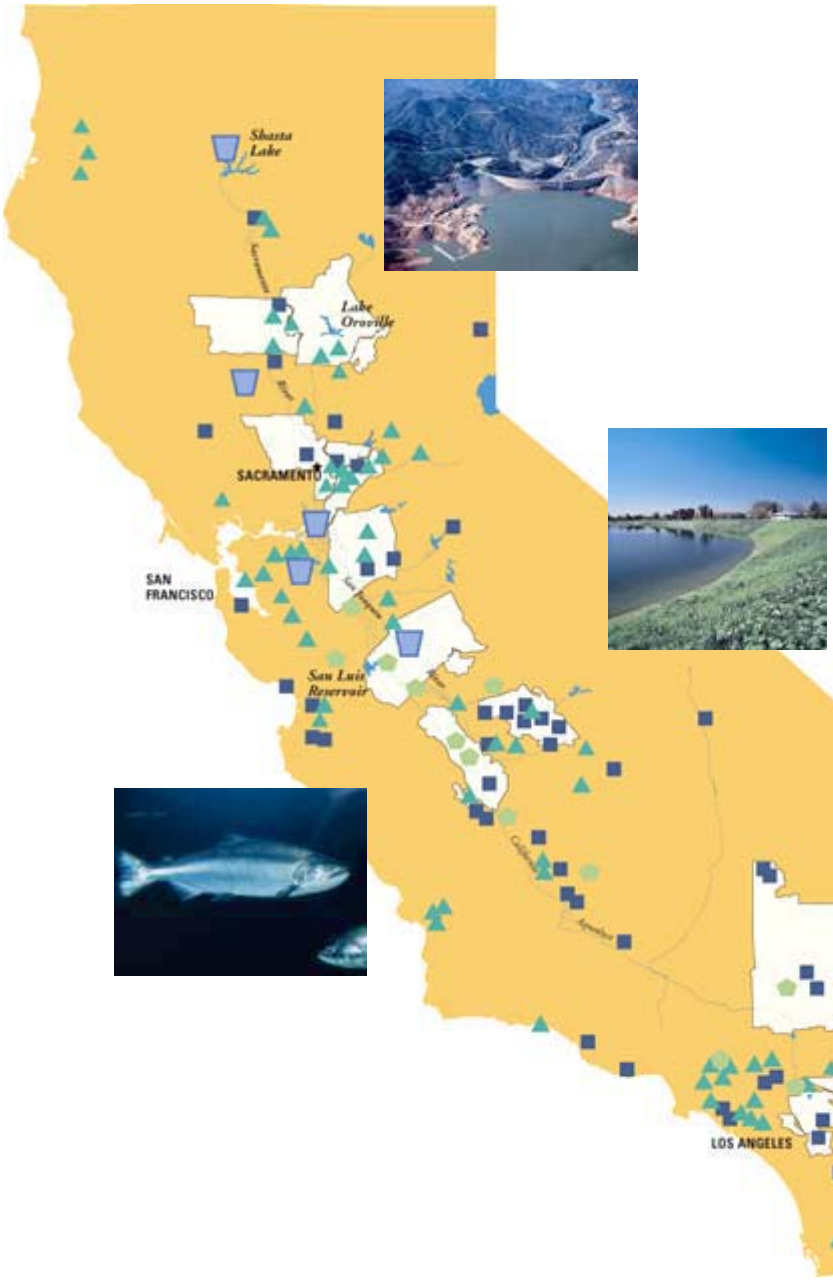
- Science
- Water Management
- Storage
- Conveyance
- Water Use Efficiency
- Water Transfers
- Ecosystem Restoration
- Environmental Water Account
- Watershed Management
- Drinking Water Quality
- Levee System Integrity




# ECOSYSTEM RESTORAT AND WATERSHEDS

## Accomplishments

- Established first-ever "single blu coordinating resource manager conservation and regulatory act state and federal agencies.
- Funded 382 ecosystem projects $400 million.
- Began fish passage improveme 182 river miles.
- Supported installation or improv fish screens to protect fish.
- Conducted 23 comprehensive s studies.










## WATER SUPPLY RELIABI

## Accomplishments

**Surface Storage**
-Planning and feasibility studies
projects underway

**Groundwater**
-Provided $74 million to assist in
and implementing groundwater
-Completed 16 Memoranda of Und
or Letters of Intent with 30 local ag

**Water Transfers**
-Over 600,000 af last year

**Environmental Water Account**
-Provided 250,000-300,000 af fo
without reducing allocations to f
and cities

**Water Use Efficiency**
-Awarded $68 million in first 2 ye

12/19/2003






## WATER QUALITY

### Accomplishments

• $34 million invested in 21 Drinking W projects for:

**Source Protection**

-Agriculture Drainage Treatment

**Water Management**

-Water Quality Exchanges for So. Cali (Friant-Met)

-Bay Area Water Quality and Supply Reliability Project

**Treatment Technology**

-Desalination Research and Innovation Partnership (MWD)

-Bromate Control with Carbon Dioxide

-Integrating UV light for Multiple Treatm

*North Bay Aqueduct (incorporates all thre improvement approaches)*

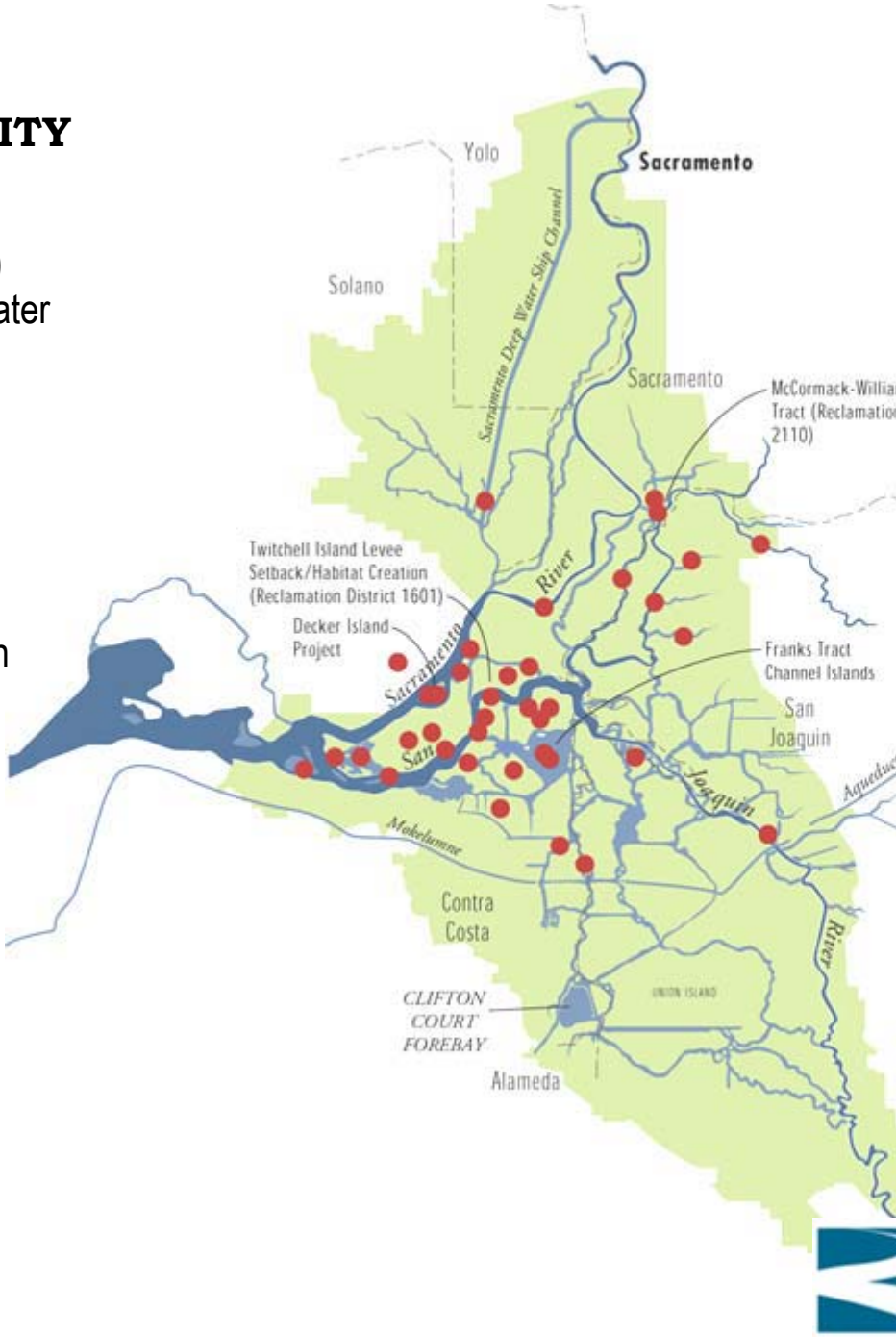
**Ecosystem Water Quality**

-San Joaquin River Dissolved Oxygen

# LEVEE SYSTEM INTEGRITY

## Accomplishments

- Improved Delta levees on over 50 Delta islands resulting in better water quality protection and greatly enhanced habitat conditions.
- Began Delta Risk Management Strategy and developed Emergency Management Plan.
- Awarded more than $18 million in year 1 to improve levees on South Delta islands



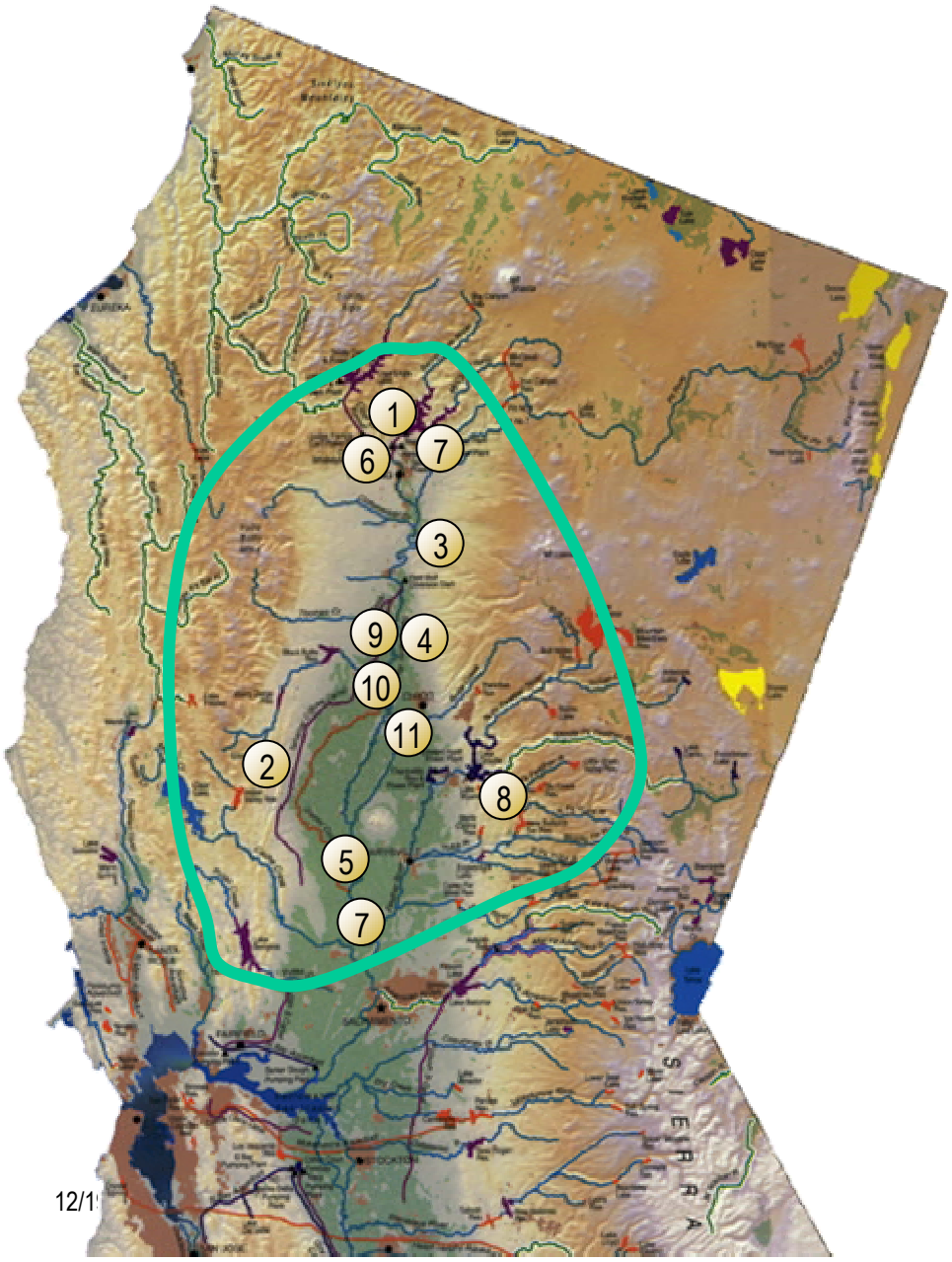
# Regional Water Initiative


- Maximizes local government involvement
- Improves program integration
- Addresses local issues and ne
- Provides greater access by loc officials and electorate

# Implementing a Regional Water Initiative

- Provide technical and fiscal support to regional effo
- Conduct statewide grant programs that require scientific, regional and public review
- Establish CALFED regional coordinators and agenc regional teams
- Conduct regional workshops and outreach meetings
- Track implementation information on a regional bas
- Integrate regionally developed goals, objectives, an performance measures into CALFED implementatio efforts.

# Sacramento Region

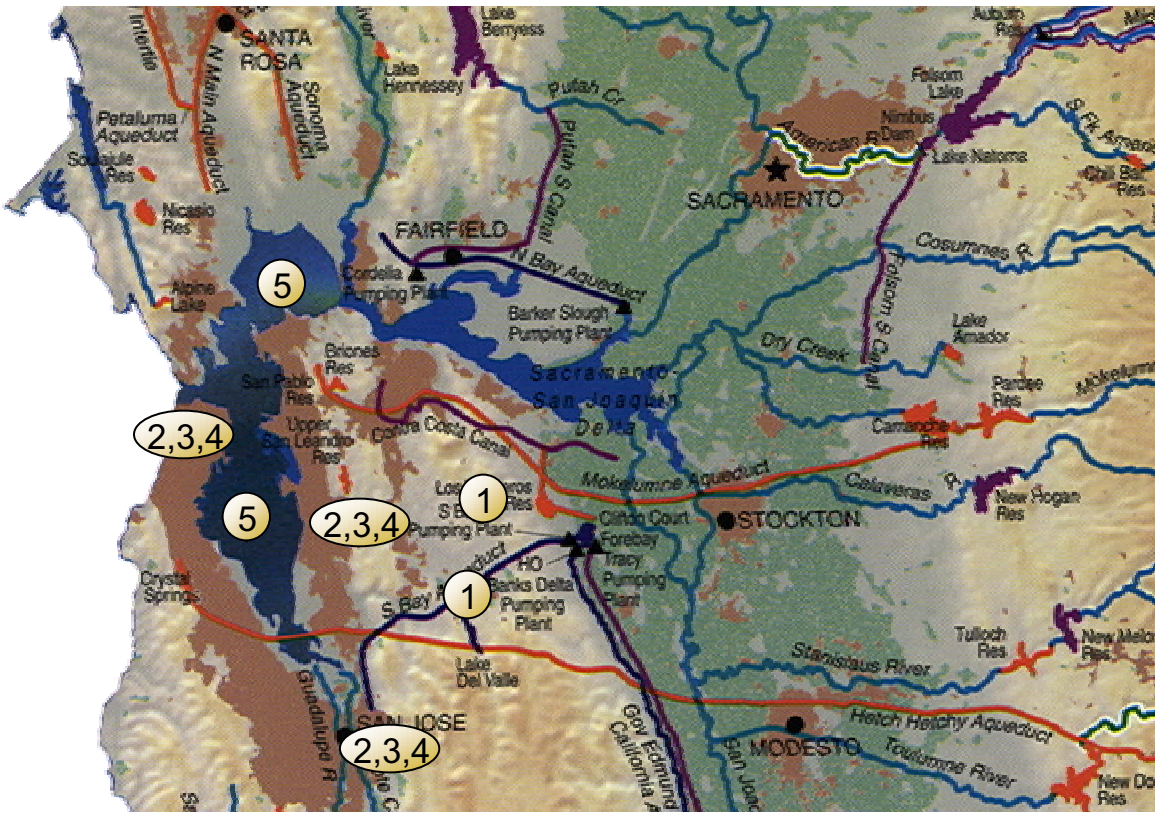



1. Enlarge Shasta
2. Sites Reservoir
3. Improve Red Bluff diversion facil
4. Improve riparian habitat in Sacra and tributaries (Establish meand
5. Fund locally controlled groundwa
6. Remediate heavy metal sources
7. Implement flood management
8. Fund watershed programs
9. Fund Ecosystem Restoration Pro
10. Screen diversions
11. Modify fish passage barriers

# Delta Region

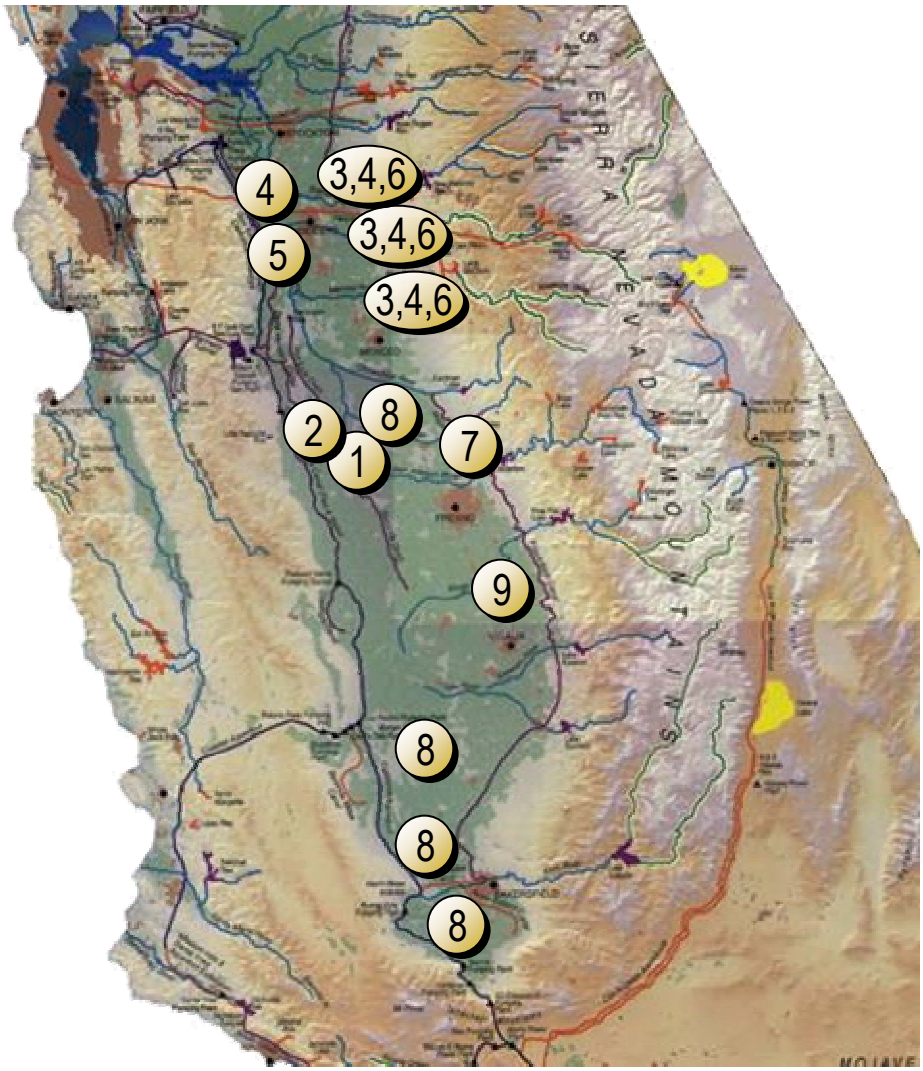

1. Implement South Del improvements
2. Implement North Delt improvements
3. Implement In-or Near Delta Storage
4. Fund flood managem
5. Fund habitat restorati
6. Fund environmental v
7. Construct CVP/SWP

# Bay Region




1. Implement Bay Area W and Water Supply Rel Program and evaluate of Los Vaqueros Rese
2. Fund water recycling
3. Expand water conserv
4. Improve water treatme
5. Fund habitat restoratio watershed manageme

# San Joaquin Region




1. Reestablish San Joaquin Rive
2. Improve San Joaquin River riparian habitat
3. Improve tributary flows
4. Restore tributary habitat
5. Screen diversions
6. Implement flood management
7. Enlarge Friant Dam (or equiva
8. Fund locally controlled groundwater banking
9. Water quality exchange progra

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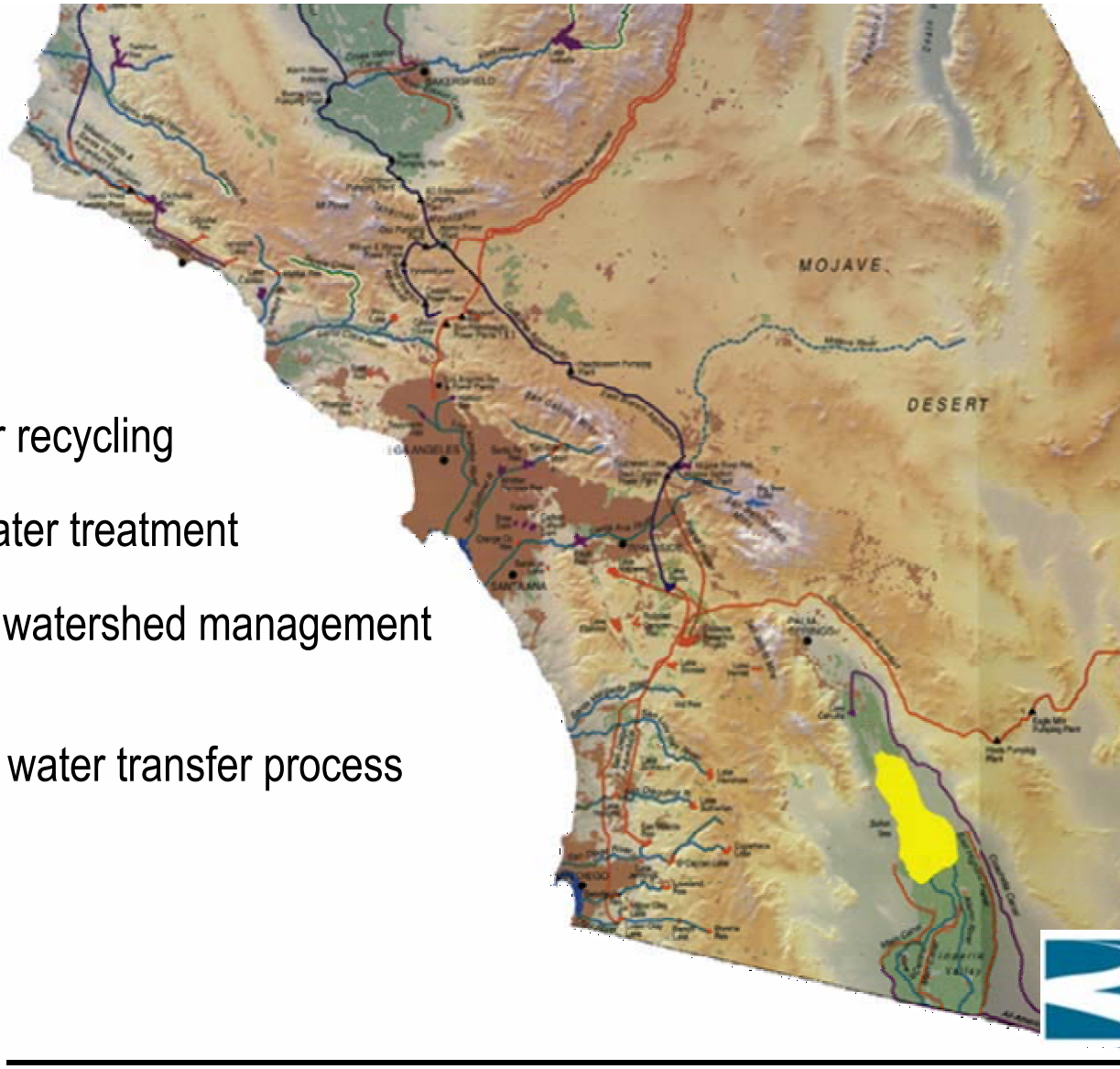
# Southern California Regio




- Fund water recycling
- Improve water treatment
- Implement watershed management programs
- Streamline water transfer process

# Promote Genui Partnerships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# CALFED Bay-Delta Science Program Acti

## PROGRAM REVIEW

- Mercury
- Stockton Deep Water Ship Channel
- IEP Water Quality - Review & Redesign
- Environmental Water Account (EWA)
- Environmental W
- Delta Cross Channel
- Upper Yuba

## WORKSHOPS

- Splittail: Life History
- EWA & Salmon
- EWA & Delta Smelt
- Data Management Strategy
- Adaptive Mgmt: Merced River
- Adaptive Mgmt: Clear Creek
- Water Ops & Env Protection in the Delta: Science Issues
- Adaptive Management: Tuolumne River
- Hydrodynamics & Salinity Response to Levee Breaches in Suisun Marsh
- Adaptive Mgmt: Experimental Design

## CONFERENCES

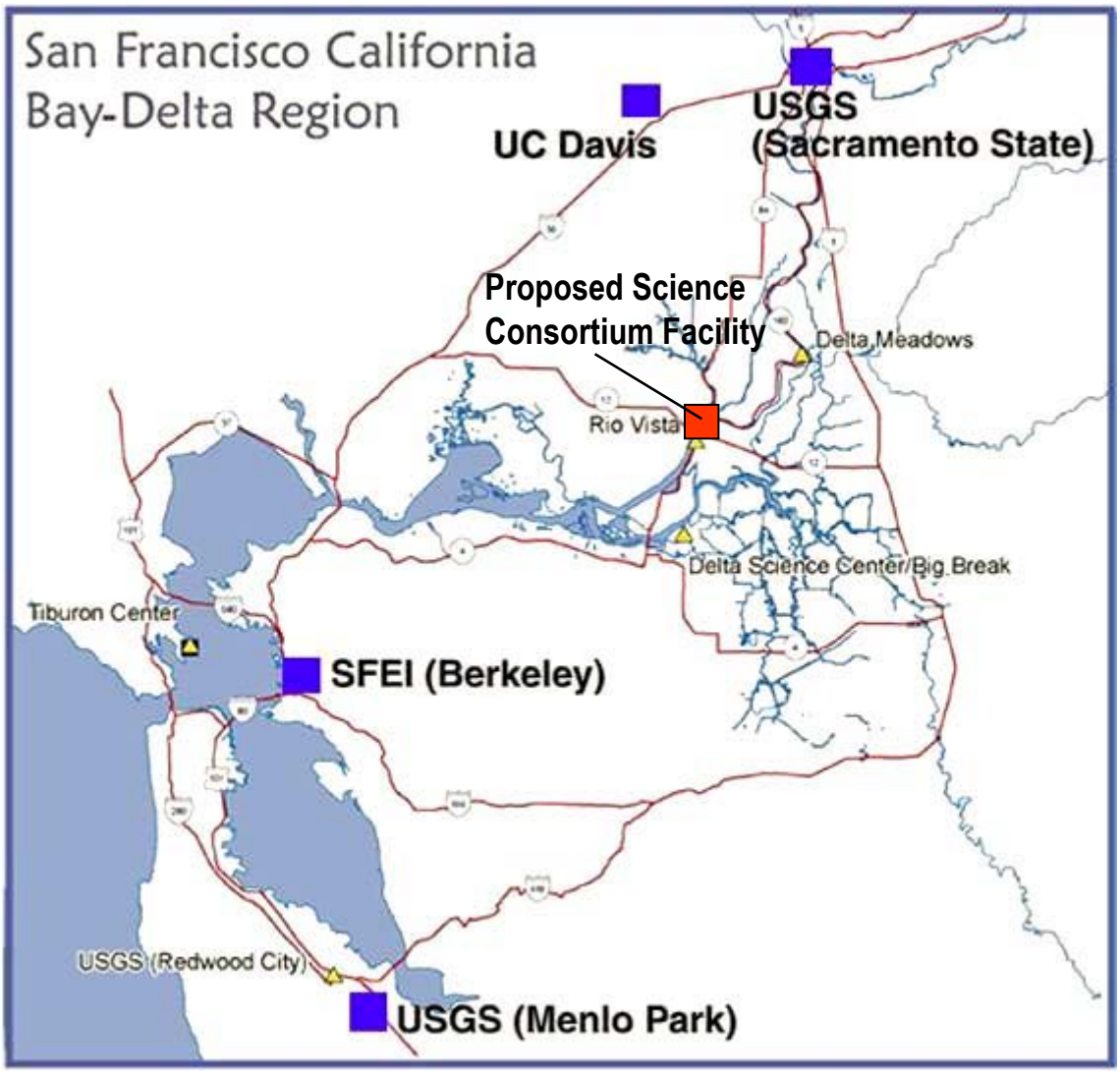
- CALFED Science Conference
- State of the Estuary Conference
- CA

Jan 2001 | April | July | Oct | Jan 2002 | April | July | Oc

12/19/2003

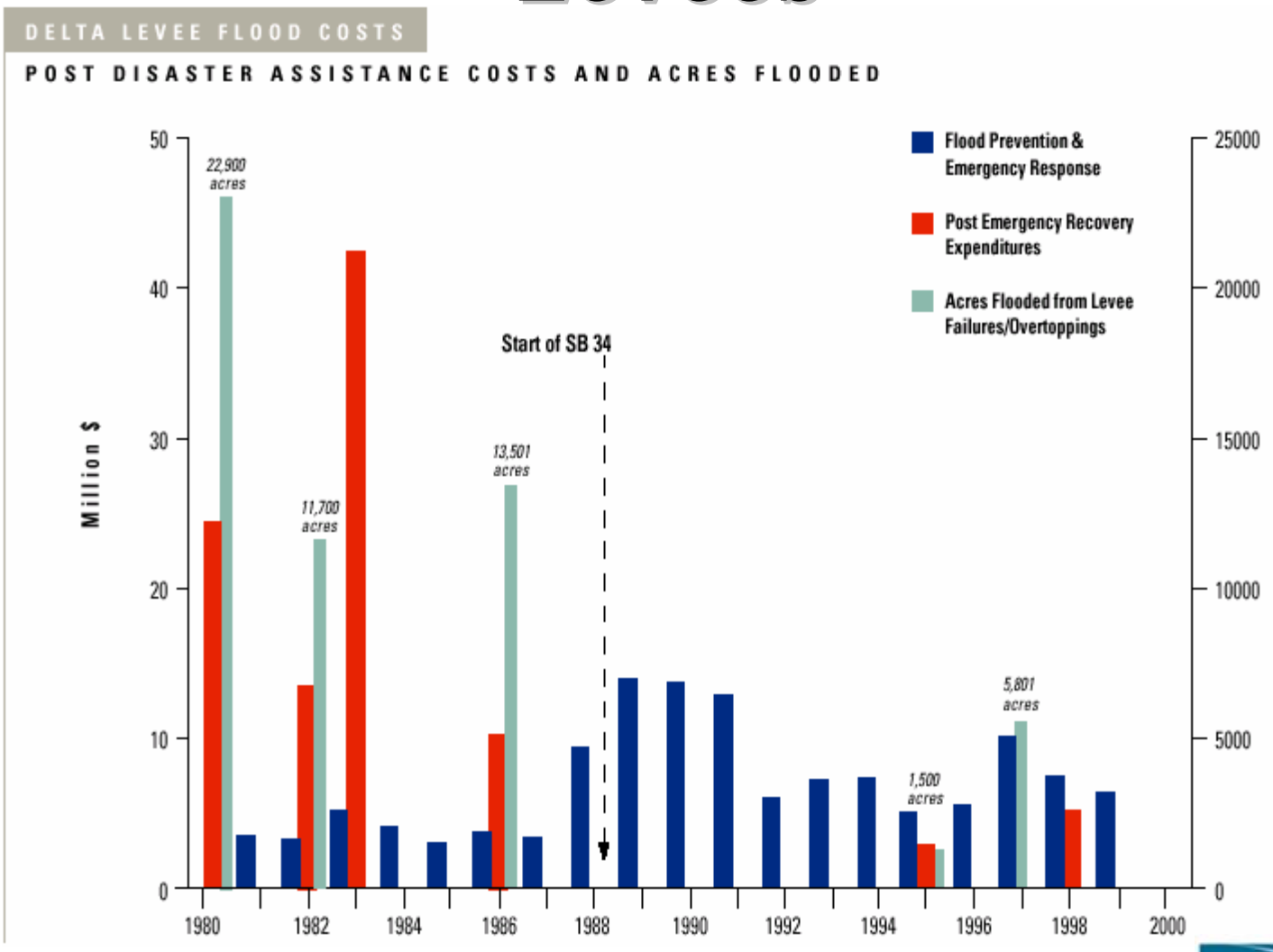
# Bay-Delta Science Consorti
# Goals

- Common interests in expanding collaboration and cooperation in the pursuit of Bay/Delta science
- Improved access to common data, experience, facilitie outreach capabilities, infrastructure, etc
- Coordination and collaboration by providing an enviror and administrative structure that facilitates partnership dedicated to collaboration and coordination of researc outreach and monitoring
- Optimizing use of existing and new science facilities a infrastructure


San Francisco California
Bay-Delta Region
UC Davis
USGS
(Sacramento State)
Proposed Science
Consortium Facility
Delta Meadows
Rio Vista
Delta Science Center/Big Break
Tiburon Center
SFEI (Berkeley)
USGS (Redwood City)
USGS (Menlo Park)

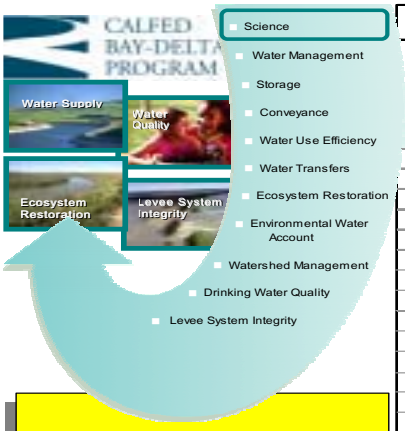
# Sample Performance Measu

## Levees



# Program Accountability an Measuring Success

**The Bay-Delta Program uses performance measures to translate progra and objectives into measurable benchmarks of success.**




**Primary Issues and Challenges**

**Prgram Wide**

- Funding shortfall affecting all aspects of CALFED Program
- Governance legislation expected to enhance cordination and improve administration
- Development of Program-wide tracking system
- Coordination between BDPAC, it's subcommittees, CALFED Elements, and CALFED agencies

**Science**

- Get CALFED Science Board up and running
- Science-based performance measures for each Program Element
- Independent science review of CALFED projects and programs

## Overview - Program Wide

| Ongoing Activities | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|
| Governance Legislation | Design | | | | | | | | | |
| Bay-Delta Public Advisory Group | | Operation/Implementation | | | | | | | | |
| Legal Support | | | | | | | | | | |
| Contracts/Fiscal Support | | | | | | | | | | |
| Public Affairs/Public Involvement | | | | | | | | | | |
| Tribal Relations Project | | | | | | | | | | |
| Environmental Justice | | | | | | | | | | |
| Environmental Compliance | | | | | | | | | | |
| Program Wide Performance/Tracking | | | | | | | | | | |
| Working Landscapes Workgroup | | | | | | | | | | |
| Regional Coordination | | | | | | | | | | |
| Water Management Strategy | | | | | | | | | | |
| Finance Plan | | | | | | | | | | |
| Annual Report | | | | | | | | | | |
| Web Development & Support | | | | | | | | | | |
| State & Federal Agency Coordination | | | | | | | | | | |
| Development -Education, Outreach & Trai | | | | | | | | | | |
| Consolidated Data Management | | | | | | | | | | |
| BDPAC&Subcommittees | | | | | | | | | | |
| Legislative & Congressional Outreach | | | | | | | | | | |
| Coordination of Agency Tracking Info | | | | | | | | | | |

## Overview - Science Program

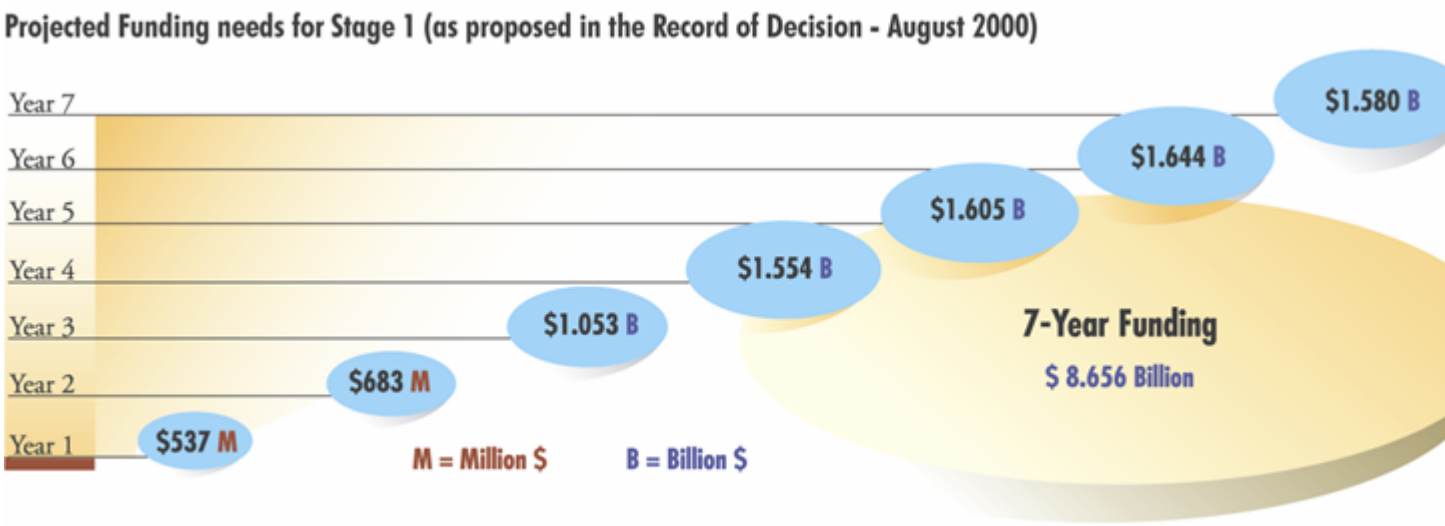
| Ongoing Activities | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|
| Appoint Independent Science Board | | | | | | | | | | |
| Develop Performance Measures | | | | | | | | | | |
| Coordinate Monitoring & Research | | | | | | | | | | |
| Refine Predictive Models | | | | | | | | | | |
| Annual Science Report | | | | | | | | | | |
| Annual EWA Review | | | | | | | | | | |

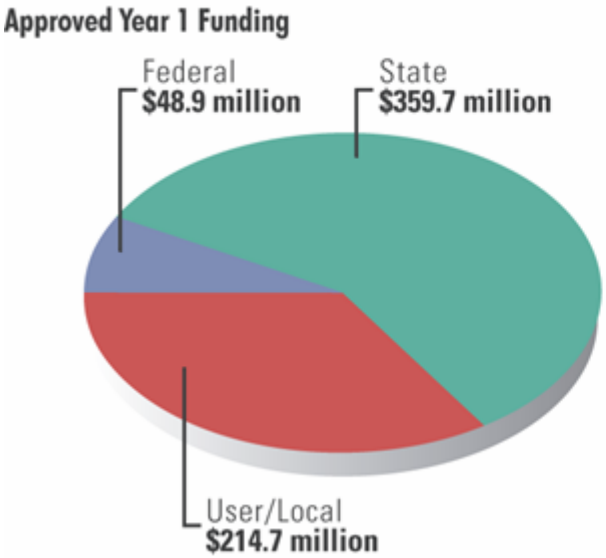
**Legend**

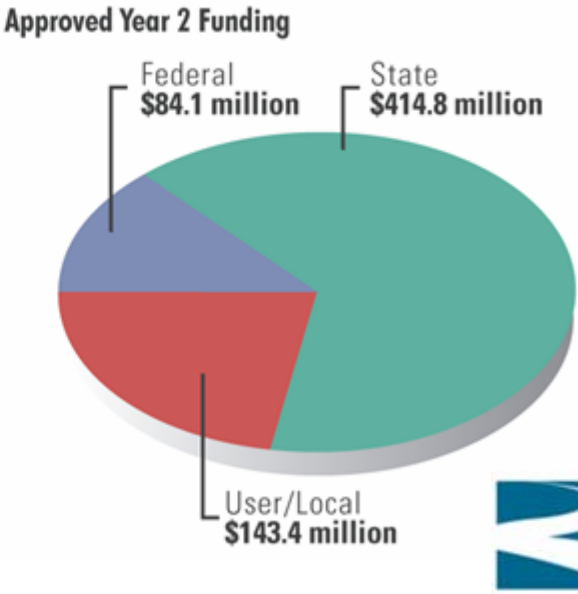
- EIS/EIR or Studies
- Authorization/Design
- Construction
- Continuous Operation/Implementation
- Major Milestone

Revision: 3/5/2002

# Fiscal Information



| Before CALFED | CALFED |
|---|---|
| • Gridlock and litigation driven process | • Collaborative process |
| • Project-by-project decisions | • Comprehensive framework with linkag and balancing requirements |
| • Single agency, single purpose projects | • Multiple purpose interagency projects |
| • Centralized decision making | • Emphasis on local and regional soluti |
| • Limited public involvement | • Extensive public involvement and lea |
| • Internal agency science-no peer review | • Independent science reviews |
| • Limited or no accountability or transparency | • Public governing body and planning a tracking systems |
| | |